

## **IN THE CLAIMS**

1. (Previously Presented) A method comprising:  
identifying first overlap information regarding where at least two digital images overlap at a first resolution level;  
purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;  
retrieving, subsequent to said purging, overlapping areas of the at least two digital images at a second resolution level higher than the first resolution level based on the first overlap information;  
and  
identifying second overlap information regarding where overlapping ones of the retrieved overlapping areas overlap at the second resolution level.
2. (Original) The method of claim 1, wherein each of the at least two digital images are stored at the first and second resolution levels.
3. (Previously Presented) The method of claim 1, wherein the retrieving comprises:  
dividing each of the at least two digital images into a plurality of areas at the second resolution level; and  
storing the plurality of areas at the second resolution level in the memory to identify where the plurality of areas overlap at the second resolution level.
4. (Previously Presented) The method of claim 1, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique to identify the first and second overlap information.
5. (Previously Presented) The method of claim 1, wherein the identifying the first overlap information regarding where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level; and  
wherein the retrieving the overlapping areas of the at least two digital images at the second resolution level overlap comprises loading the overlapping areas based on the identified coordinates.

6. (Original) The method of claim 1, comprising:  
combining the at least two digital images.
7. (Original) The method of claim 1, comprising:  
identifying where the at least two digital images overlap at one or more resolution levels  
higher than the second resolution level.
8. (Previously Presented) The method of claim 1, comprising:  
identifying further, first overlap information regarding where another set of at least two  
digital images overlap at the first resolution level;  
retrieving overlapping areas of the other set of at least two digital images at the second  
resolution level based on the further, first overlap information;  
identifying further, second overlap information regarding where overlapping ones of the  
retrieved overlapping areas overlap at the second resolution level; and  
combining the digital images.
9. (Previously Presented) A computer readable medium having instructions that, when  
executed by a computer, perform a method comprising:  
identifying first overlap information regarding where at least two digital images overlap at a  
first resolution level;  
purging memory, subsequent to said identifying, of the at least two digital images at the first  
resolution level;  
retrieving, subsequent to said purging, overlapping areas of the at least two digital images at  
a second resolution level higher than the first resolution level based on the first overlap information;  
and  
identifying second overlap information regarding where overlapping ones of the retrieved  
overlapping areas overlap at the second resolution level.
10. (Original) The computer readable medium of claim 9, wherein each of the at least  
two digital images are stored at the first and second resolution levels.

11. (Previously Presented) The computer readable medium of claim 9, wherein the retrieving comprises:  
dividing the at least two digital images into a plurality of areas at the second resolution level;  
and  
storing the plurality of areas at the second resolution level in memory to identify where the plurality of areas overlap at the second resolution level.

12. (Previously Presented) The computer readable medium of claim 9, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique to identify the first and second overlap information.

13. (Previously Presented) The computer readable medium of claim 9, wherein the identifying first overlap information regarding where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images overlap at the first resolution level; and  
wherein the retrieving the overlapping areas of the at least two digital images at the second resolution level comprises loading the overlapping areas based on the identified coordinates.

14. (Original) The computer readable medium of claim 9, wherein the method comprises combining the at least two digital images.

15. (Original) The computer readable medium of claim 9, wherein the method comprises identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

16. (Previously Presented) The computer readable medium of claim 9, wherein the method comprises:  
identifying further, first overlap information regarding where another set of at least two digital images overlap at the first resolution level;  
retrieving overlapping areas of the other set of at least two digital images at the second resolution level based on the further, first overlap information;

identifying further, second overlap information regarding where overlapping ones of the retrieved overlapping areas of the other set of at least two digital images overlap at the second resolution level; and

combining the digital images.

17. (Previously Presented) A computer system comprising:

- (a) one or more processors; and
- (b) a computer readable medium to store instructions that, when executed by the one or more processors, perform:
  - (i) identifying first overlap information regarding where at least two digital images overlap at a first resolution level,
  - (ii) purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;
  - (iii) retrieving, subsequent to said purging, overlapping areas of the at least two digital images at a second resolution level higher than the first resolution level based on the first overlap information, and
  - (iv) identifying second overlap information regarding where overlapping ones of the retrieved overlapping areas overlap at the second resolution level.

18. (Original) The computer system of claim 17, comprising a computer readable medium to store each of the at least two digital images at the first and second resolution levels.

19. (Previously Presented) The computer system of claim 17, wherein retrieving comprises:

dividing each of the at least two digital images into a plurality of areas at the second resolution level, and

storing the plurality of areas at the second resolution level in memory to identify where the plurality of areas overlap at the second resolution level.

20. (Previously Presented) The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique to identify the first and second overlap information.

21. (Previously Presented) The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and wherein the retrieving the overlapping areas of the at least two digital images at the second resolution level comprises loading the overlapping areas based on the identified coordinates.

22. (Original) The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform combining the at least two digital images.

23. (Original) The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

24. (Previously Presented) The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform:  
identifying further, first overlap information regarding where another set of at least two digital images overlap at the first resolution level,  
purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;  
retrieving, subsequent to said purging, overlapping areas of at least two digital images at the second resolution level based on the further, first overlap information;  
identifying further, second overlap information regarding where overlapping ones of the retrieved overlapping areas of the other set of at least two digital images overlap at the second resolution level.

25. (Previously Presented) A computer system comprising:  
means for identifying first overlap information regarding where at least two digital images overlap at a first resolution level;  
means for purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;  
means for retrieving, subsequent to said purging, overlapping areas of the at least two digital images at a second resolution level higher than the first resolution level based on the first overlap information; and

means for identifying second overlap information regarding where overlapping ones of the retrieved overlapping areas overlap at the second resolution level.

26. (Previously Presented) The computer system of claim 25, comprising:  
means for dividing the at least two digital images into a plurality of areas at the second resolution level; and  
means for storing the plurality of areas at the second resolution level in the memory to identify where the plurality of areas overlap at the second resolution level.

27. (Original) The computer system of claim 25, comprising:  
means for combining the at least two digital images.

28. (Previously Presented) The method of claim 1, wherein the retrieving further comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

29. (Previously Presented) The computer readable medium of claim 9, wherein the retrieving further comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

30. (Previously Presented) The computer system of claim 17, wherein the dividing comprises retrieving further each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

31. (Previously Presented) The computer system of claim 25, wherein the dividing means comprises means for dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

Claims 32-43 (Cancelled)